

# **COMMONWEALTH of VIRGINIA**

# DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit No.

**VPA02058** 

Effective Date:

June 18, 2012

**Expiration Date:** 

June 17, 2022

# AUTHORIZATION TO MANAGE POLLUTANTS UNDER THE VIRGINIA POLLUTION ABATEMENT PERMIT AND

THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the State Water Control Law and the Permit Regulation adopted pursuant thereto, the following owner is authorized to manage pollutants in conformity with the application, plans, specifications, and supporting data submitted to the Department of Environmental Quality, and other conditions set forth in this permit.

Owner:

Mary Moody Northen Endowment

Owner Address:

2628 Broadway Street, Galveston, TX 77550

Facility Name:

Mountain Lake Hotel Wastewater Treatment Plant

The authorized pollutant management shall be in accordance with this cover page, Part I - Monitoring Requirements and Special Conditions, Part II - Conditions Applicable to All VPA Permits, Attachment A, and Attachment B as set forth herein.

Robert J. Weld

Blue Ridge Regional Office

**Regional Director** 

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# A. Monitoring Requirements – Effluent Monitoring from Sewage Treatment Plant (E-1)

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to the permittee is authorized to pump sewage from the sewage treatment plant at the Mountain Lake Hotel. This effluent shall be limited and monitored as specified below:

		EFFLUENT LIMIT	ATIONS		MONITORING	REQUIREMENTS
Effluent Characteristic	Monthly Average	Weekly Average	<u>Minimum</u>	<u>Maximum</u>	Frequency	Sample Type
Flow (MGD) <sup>a</sup>	NL	NA	NA	NL	1/Day	Measured
pH (Standard Units) <sup>b</sup>	NA	NA	6.0	9.0	1/Day	Grab
BOD <sub>5</sub> <sup>b,c</sup>	NL mg/L	NA	NA	. 60 mg/L	1 Month	Grab
Total Suspended Solidsb,c	NL mg/L	NL mg/L	NA	NA	1/Month	Grab
E. coli <sup>b</sup>	NA	NA	NA	18 N/100 mL	1/Month	Grab
Total Residual Chlorineb,c	. NA	NA	2.0 mg/L	NA	1/Day	Grab
Volume in Storage	NL MG	NA	NA	NA	1/Day	Calculated
Remaining Storage Capacity  NL = No Limitation with moni	NA toring required	NA NA = Not Applicable	NL MG	NA	1/ Day	Calculated

- a. The design flow of this treatment facility is 0.035 MGD. See Part I.B.4 for additional flow requirements.
- b. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: after chlorination and prior to storage.
- c. See Part I.B.1 for quantification levels and reporting requirements.

# A. Monitoring Requirements – Effluent Storage Tank (S-1)

2. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to manage pollutants at the Mountain Lake Hotel WWTP land application facility. The pollutants shall be limited and monitored by the permittee as specified below:

	<u>ĒF</u>	EFFLUENT LIMITATIONS			
<u>PARAMETERS</u>	<u>LIMITATIONS</u>	<u>UNITS</u>	MONITORING RE	QUIREMENTS	
		4	Frequency <sup>a</sup>	Sample Type	
Volume from Storage	NL	MG	Continuous	TIRE*	
pН	NL	S.U.	1/Month	Grab	
E. coli (maximum)	18	N/100 mL	1/Month	Grab	
BOD₅ <sup>b</sup>	NL	mg/L	1/Month	Composite**	
Total Kjeldahl Nitrogen (TKN) <sup>6</sup>	NL .	mg/L	1/Month	Composite**	
Ammonia Nitrogen (NH3-N) <sup>b</sup>	NL	mg/L	1/Month	Composite**	
Nitrate Nitrogen <sup>b</sup>	NL	mg/L	1/Month	Composite**	
Nitrogen, Total <sup>b</sup>	NL	mg/L	1/Month	Calculated	
Phosphorus, Total <sup>b</sup>	NL	mg/L	1/Year <sup>c</sup>	Composite**	
Potassium, Total	NL	mg/L	1/Year <sup>c</sup>	Composite**	
Sodium, Total	NL	mg/L	1/Year <sup>c</sup>	Composite**	
Cadmium, Total Recoverable <sup>b</sup>	NL	mg/L	1/4 Years <sup>c</sup>	Composite**	
Copper, Total Recoverable <sup>b</sup>	NL	mg/L	1/4 Years <sup>c</sup>	Composite**	
Lead, Total Recoverable <sup>b</sup>	NL	mg/L	1/4 Years <sup>c</sup>	Composite**	
Nickel, Total Recoverable <sup>b</sup>	NL	mg/L	1/4 Years <sup>c</sup>	Composite**	
Zinc, Total Recoverable <sup>b</sup>	NL	mg/L	1/4 Years <sup>c</sup>	Composite**	
NL = No limit, this is a monitoring red	quirement only		indicating, recording eq	uipment	
**/		, , , , , , , , , , , , , , , , , , ,	<u></u>		

<sup>\*\*</sup>Composite = A representative composite sample shall be comprised of at least a four volume average or weight average grab samples composite over a daily operating period.

- a. Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent storage tank pump station. Monitoring is required during months when effluent is land applied.
- b. See Part I.B.1 for quantification levels and reporting requirements.
- c. Sampling results collected at a frequency of 1/4 years or yearly shall be submitted as part of the monthly VPA Monitoring Report following the sampling period in which it was gathered. See Attachment B of permit for due dates.

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# A. Monitoring Requirements - Land Application Sites (F-1 through F-16)

3. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to manage pollutants at the Mountain Lake Hotel WWTP land application sites authorized in Attachment A of this permit. The pollutants shall be limited and monitored by the permittee as specified below:

<u>PARAMETERS</u>	<b>LIMITATIONS</b>	<u>UNITS</u>	MONITORING REQUI	REMENTS
Total Effluent Volume (each site)	NL	gallons	Frequency 1/Month	Sample Type Calculated
Hourly Maximum Application Rate	0.25	inches/hour	1/Day	Calculated
Weekly Maximum Application Rate	0.85	inches/week	1/Week	Calculated
Effluent Nitrogen Applied (each site)*	NL	pounds	I/Month	Calculated
Total Nitrogen Applied Year-to-Date (each site)	NL ,	pounds	1/Month	Calculated
Yearly Total Nitrogen Applied (each site)	127	pounds	1/Year	Calculated

NL = No limit, this is a monitoring requirement only

<sup>\*</sup>Total pounds of nitrogen for a one acre site shall be calculated as follows: Total N/month = (total N, mg/L)(total volume applied during month), MG)(8.34 lbs/gal)

# A. Monitoring Requirements – Soil Monitoring (D-1)

4. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to manage pollutants at the Mountain Lake Hotel WWTP land application site. The pollutants shall be limited and monitored by the permittee as specified below:

• **	SOIL MONITO	RING		
<u>PARAMETERS</u>	<b>LIMITATIONS</b>	<u>UNITS</u>	MONITORING REC	DUIREMENTS
	ė.	4	Frequency <sup>a</sup>	Sample Typeb
Soil Organic Matter	NL	%	1/ 4 Years	Composite
Soil pH	NL	S.U.	I / 4 Years	Composite
Total Nitrogen	NL	ppm	1/ 4 Years	Composite
Organic Nitrogen	NL	ppm"	1/ 4 Years	Composite
Available Phosphorus	NL	ppm	1/ 4 Years	Composite
Exchangeable Potassium	NL	mg/100 g	1/ 4 Years	Composite
Exchangeable Sodium	NL	mg/100 g	1/ 4 Years	Composite
Exchangeable Calcium	NL	mg/100 g	I/ 4 Years	Composite
Exchangeable Magnesium	NL	mg/100 g	1/ 4 Years	Composite
Cation Exchange Capacity (CEC)	NL	meg/100 g	1/ 4 Years	Composite
Total Cadmium	NL ·	ppm	1/ 4 Years	Composite
Total Copper	NL	ppm	1/ 4 Years	Composite
Total Lead	NL	ppm	I/ 4 Years	Composite
Total Nickel	NL .	ppm	1/ 4 Years	Composite
Total Zinc	NL	ppm	1/ 4 Years	
Particle Size Analysis or		PF	ir 4 rears	Composite
USDA Textural Estimate	NL	%	1/ 4 Years	Composito
Hydraulic Conductivity (In most restrictive soil horizon)	NL	in/hr	1/ 4 Years	Composite Composite
Sodium Absorption Ratio (SAR) <sup>c</sup> NL = No limit, this is a monitoring requ	NL firement only	none	1/ 4 Years	Calculated
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- a. Soil samples shall be collected according to the schedule in Attachment B of this permit.
- b. Soil composite samples shall be representative of the soil types delineated by the SCS Soil Survey (or the equivalent). Samples shall be taken at a 0-6 inch soil depth. Sampling shall be performed as designated in the Soil Monitoring Plan Special Condition (Part I.C.2). Sampling results shall be submitted as part of the Monitoring Report form.
- c.  $SAR = [NA^+] / \{([Ca^{2+}] + [Mg^{2+}]) / 2\}^{1/2}$

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# A. Monitoring Requirements - Ground Water Monitoring (M-1 through M-4)

5. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to manage pollutants at the Mountain Lake Hotel WWTP land application site. The pollutants shall be limited and monitored by the permittee as specified below:

•	<u>GRO</u> I	JND WATER MONITORING	•	•
<u>PARAMETERS</u>	<b>LIMITATIONS</b>	<u>UNITS</u>	MONITORING R	<u>EQUIREMENTS</u>
Static Water Level (elevation) <sup>a</sup> Chlorides Conductivity Nitrate Nitrogen <sup>d</sup> pH	NL NL NL NL NL	feet mg/L mmhos/cm mg/L S.U	Frequency 1/Quarter 1/Quarter 1/Quarter 1/Quarter 1/Quarter 1/Quarter	Sample Type <sup>b</sup> Measured Grab Grab Grab Grab

NL = No limit, this is a monitoring requirement only.

- a. The static water level shall be measured prior to any required bailing for well water for sampling.
- b. At least three well volumes of ground water shall be withdrawn immediately prior to sampling for monitoring well #4.
- c. Ground water monitoring shall be conducted at locations identified as Site 1 (M-1), Site 2 (M-2), Site 3 (M-3), and Site 4 (M-4) in the permit application (and permit Fact Sheet) according to the schedule in Attachment B of this permit.
- d. See Part I.B.1 for quantification levels and reporting requirements.

#### 1. Compliance Reporting

a. The quantification levels (QLs) shall be less than or equal to the following concentrations:

•	
Effluent Characteristic	Quantification Level
Ammonia	0.20 mg/L
BOD <sub>5</sub>	5.0 mg/L
Chlorine	0.10 mg/L
Total Suspended Solids	1.0 mg/L
Total Kjeldahl Nitrogen	0.50 mg/L
Phosphorus, Total	0.010 mg/L
Total Nitrogen, Nitrate Nitrogen	$0.50~\mathrm{mg/L}$
Cadmium, Total Recoverable	0.50 μg/L
Copper, Total Recoverable	5 μg/L
Lead, Total Recoverable	4 μg/L
Nickel, Total Recoverable	5 μg/L
Zinc, Total Recoverable	10 μg/L

The QL is defined as the lowest concentration used to calibrate a measurement system in accordance with the procedures published for the method. It is the responsibility of the permittee to ensure that proper quality assurance/quality control (QA/QC) protocols are followed during the sampling and analytical procedures. QA/QC information shall be documented to confirm that appropriate analytical procedures have been used and the required QLs have been attained. The permittee shall use any method in accordance with Part II.A of this permit.

## b. Monthly Average

Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in subsection a. of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as it is reported. An arithmetic average shall be calculated using all reported data for the month, including the defined zeros. This arithmetic average shall be reported on the Monitoring Report (MR) as calculated. If all data are below the QL used for the analysis (QL must be less than or equal to the QL listed in 1.a above), then the average shall be reported as "<QL".

# 1. Compliance Reporting (Continued)

#### c. Weekly Average

Compliance with the weekly average limitations and/or reporting requirements for the parameters listed in subsection a. of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis (QL must be less than or equal to the QL in a. above) shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each complete calendar week and entirely contained within the reporting month. The maximum value of the weekly averages thus determined shall be reported on the MR. If all data are below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above), then the weekly average shall be reported as "<QL".

## d. Single Datum

Any single datum required shall be reported as "<QL" if it is less than the QL used for the analysis (QL must be less than or equal to the QL listed in a. above). Otherwise the numerical value shall be reported.

# e. Significant Digits

The permittee shall report at least the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding convention used by the permittee (i.e., 5 always rounding up to or to the nearest even number), the permittee shall use the convention consistently, and shall ensure that consulting laboratories employed by the permittee use the same convention.

# 2. Storm Water Discharge Exception

All pollutant management activities covered under this permit shall maintain no point source discharge of pollutants to surface waters except in the case of a storm event greater than the 25-year, 24-hour storm. The operation of the facilities of the owner permitted herein shall not contravene the Water Quality Standards, as adopted and amended by the Board, or any provision of the Water Control Law.

#### 3. Indirect Dischargers

Publicly or Privately Owned Sewage Treatment works shall provide adequate notice to the Department of any substantial change in quantity or quality of pollutants being introduced into the privately or publically owned sewage treatment works and any anticipated impact the change may have on such treatment works.

## 4. 95% Capacity Reopener

A written notice and a plan of action for ensuring continued compliance with the terms of this permit shall be submitted to the Blue Ridge Regional Office when the monthly average flow influent to the sewage treatment plant reaches 95 percent of the design capacity authorized in this permit for each month of any three consecutive month period. The written notice shall be submitted within 30 days and the plan of action shall be received at the Blue Ridge Regional Office no later than 90 days from the third consecutive month for which the flow reached 95 percent of the design capacity. The plan shall include the necessary steps and a prompt schedule of implementation for controlling any current or reasonably anticipated problem resulting from high influent flows. Failure to submit an adequate plan in a timely manner shall be deemed a violation of this permit.

# 5. Licensed Operator Requirement

The permittee shall employ or contract at least one wastewater works operator who holds a current wastewater license appropriate for the permitted facility. A Class III licensed operator is required for this facility. The license shall be issued in accordance with Title 54.1 of the Code of Virginia and the regulations of the Board for Waterworks and Wastewater Works Operators. The permittee shall notify the Department in writing whenever he is not complying, or has grounds for anticipating he will not comply with this requirement. The notification shall include a statement of reasons and a prompt schedule for achieving compliance.

# 6. Materials Storage and Handling

Any and all product, materials, industrial wastes, and/or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, and/or storage of raw or intermediate materials, final product, by-product or wastes, shall be handled, disposed of, and/or stored in such a manner so as not to permit a discharge of such product, materials, industrial wastes, and/or other wastes to State waters, except as expressly authorized.

## 7. Operations and Maintenance Manual Requirement

The permittee shall submit for approval to the DEQ Regional Office by September 12, 2012, an updated Operations and Maintenance (O&M) Manual for the treatment works/pollutant management system permitted herein. This manual shall reflect the practices and procedures, including applicable Best Management Practices, followed by the permittee to ensure compliance with the requirements of this permit. The permittee will maintain an accurate, approved O&M Manual for the treatment works/pollutant management system. This manual shall detail the practices and procedures which will be followed to ensure compliance with the requirements of the permit. Any changes in those practices and procedures shall be documented and submitted for staff approval within 90 days of the effective date of the changes. Upon approval of submitted manual changes, the revised manual becomes an enforceable part of the permit. Noncompliance with the manual shall be deemed a violation of the permit. This Manual shall include, but not necessarily be limited to, the following items as appropriate:

- a. A description of the wastewater treatment plant process and detailed instructions for the operation of the wastewater treatment plant.
- b. A description of all appurtenances associated with the sewage treatment and distribution process collection system, irrigation system) and detailed instructions for the operation of these appurtenances.
- c. Routine maintenance procedures and schedules;
- d. Steps and procedures to be followed by the operator when substandard water is being produced;
- e. Descriptions of sampling and monitoring procedures and record keeping and reporting procedures;
- f. An irrigation schedule.
- A plan for management and disposal of solids or sludge generated by the wastewater treatment facility.
- h. Staffing of wastewater treatment plant.
- i. Responsible officials, their duties, and their roles.

#### 8. Reliability Class

The permitted treatment works shall meet Reliability Class I requirements.

### 9. Sludge Reopener

The Board may promptly modify or revoke and reissue this permit if any applicable standard for sewage sludge use or disposal promulgated under Section 405(d) of the Clean Water Act is more stringent than any requirements for sludge use or disposal in this permit, or controls a pollutant or practice not limited in this permit.

#### 10. Site Specification

Effluent shall be applied only at the sites identified in Attachment A of this permit.

#### 11. Operational Requirements

- a. There shall be no application of effluent to the ground when it is saturated, frozen, or covered with ice or snow, and during periods of rainfall.
- b. Effluent shall be prevented from coming into contact with drinking fountains, water coolers, or eating surfaces.
- c. Application or irrigation systems used for land treatment of wastewater shall be designed, installed, and adjusted to:
  - (1) Provide uniform distribution of effluent over the land treatment site,
  - (2) Prevent ponding or pooling of effluent at the land treatment site,
  - (3) Facilitate maintenance and harvesting of land treatment site and precludes damage to the application or irrigation system from the use of maintenance or harvesting equipment;
  - (4) Prevent aerosol carry-over from the land treatment site to areas beyond the setback distance described in Part I.B.15.
  - (5) Prevent clogging from algae or suspended solids.
  - (6) Maximum application rates in terms of depth of effluent applied to the site shall not exceed 0.25 inches per hour and 0.85 inches per week.

## 12. Monthly Activity Summary Report

A summary report of the previous month's activities shall be submitted to the DEQ Regional Office by the 10<sup>th</sup> of the following month. Reports shall include:

- a. Analyses of samples of sewage effluent during the previous month reported on the monitoring report forms.
- b. Results of soil and ground water monitoring (when applicable) in accordance with Part I.A of the permit reported on the monitoring report forms.
- c. Land application site information describing the effluent applied to each field during the previous month reported on the monitoring report form.
- d. A summary of the quantities of effluent stored in or withdrawn from the storage facilities and the remaining storage capacity.

# 13. Annual Project Summary Report

An annual summary report shall be submitted to the DEQ Regional Office by **February 10<sup>th</sup>** of each year. The report shall include the following:

- a. A summary of monitoring data results including effluent analysis, soil monitoring, and ground water monitoring,
- b. The yearly water balance showing such items as input/drawdown from storage facilities.
- c. Land application site information describing the effluent applied to each field during the previous year with the annual and cumulative loading of rate limiting constituents (such as nitrogen and metals) and the remaining site life for each field.
- d. A summary of the any silviculture or forestry practices which occurred during the preceding growing season including but not limited to the timing and number of tree cuttings, and an estimate of total timber yield (tons/acre) removed from each field; any lime, fertilizer, or soil amendment applications made to a field other than in the effluent applied to the same field (describe type and quantities), and reseeding or replanting.

# 13. Annual Project Summary Report (Continued)

e. A general statement of past system performance and the status of the permitted facilities with regard to complying with Virginia Pollutant Abatement requirements.

#### 14. Buffer Zones

The following minimum buffer zones shall be maintained from the sites of effluent application to the features noted below:

Buffered Feature	Minimum Distance (feet)
Drinking water supply wells or springs	50
Occupied dwellings	100
Property lines	50
Surface water courses (including dry ditches)	50
All improved roadways	25
Rock outcrops (with the exception of limestone outcrops)	25
Limestone outcrops	50
Sinkholes	*

<sup>\*</sup>Wastewater shall not be applied in such a manner that it would discharge to sinkholes that may exist in the area.

#### 15. Wind Restriction

Land application of effluent shall not occur during winds of sufficient strength to cause overspray or drifting of aerosols into or beyond the buffer zones.

# 16. Permit Application Requirement

In accordance with Part II.M of the permit, a new and complete permit application shall be submitted for the reissuance of this permit by the following date: October 29, 2021.

## C. <u>Site Specific Special Conditions</u>

#### 1. Ground Water Monitoring Plan

The permittee shall sample and report monitoring results in accordance with the ground water monitoring plan found in the reissuance application and Attachment D of the Fact Sheet. Monitoring parameters for sites 1, 2, 3, and 4 and are found in Part I.A of the permit. This plan is an enforceable part of the permit. Any changes to the plan must be submitted for approval to the DEQ Regional Office.

If monitoring results indicate that the irrigation water has contaminated the ground water, the permittee shall submit a corrective action plan within 60 days of being notified by the regional office. The plan shall set forth the steps to be taken by the permittee to ensure that the contamination source is eliminated or that the contaminant plume is contained on the permitte's property. In addition, based on the extent of contamination, a risk analysis may be required. Once approved, this plan and/or analysis shall be incorporated into the permit by reference and become an enforceable part of this permit.

## 2. Soil Monitoring Plan

The permittee shall develop a protocol for soil sampling for the parameters listed in Part I.A using the guidance as applicable in 9 VAC 25-790-880C of the Sewage Collection and Treatment Regulations. Soil cores shall be collected in the most restrictive soil layer. The plan shall include areas where soil samples will be composited. The plan shall also include the number of samples, cores, and sampling methodology to collect randomized samples representative of all of the sites where land application is taking place. The soil monitoring plan shall be submitted to the DEQ Regional Office for review and approval by **October 10, 2012**.

#### 3. Facilities Closure Plan

A Facilities Closure Plan shall be developed prior to termination of the pollutant management activities for all wastewater treatment, storage, and handling facilities covered under this permit. Prior to implementation, the plan must be submitted to the DEQ Regional Office for review and approval. The plan shall include the following:

- a. A listing of all facilities to be closed and proposed dates for beginning and completing closure for each;
- b. Verification that sources of all waste generated by facilities to be closed have been or will be eliminated through discontinued operation or an alternate treatment scheme;

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## C. <u>Site Specific Special Conditions</u>

# 3. Facilities Closure Plan (Continued)

- c. A listing of all waste products generated by facilities to be closed and a description of the procedures for removal, land application or other proper disposal of the wastes;
- d. The volume, percent solids, nutrient content, and other waste characterization information regarding the nature of the waste materials;
- e. Removal, demolition, and disposal of structures, equipment piping, and appurtenances;
- f. Site grading and erosion and sediment control; and
- g. Proposed land use following closure of the facilities.

#### PART II - CONDITIONS APPLICABLE TO ALL VPA PERMITS

#### A. Monitoring

- 1. Samples and measurements taken as required by this permit shall be representative of the monitored activity.
- 2. Monitoring shall be conducted according to procedures approved under Title 40 Code of Federal Regulations Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this permit.
- 3. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will insure accuracy of measurements.
- 4. Samples taken as required by this permit shall be analyzed in accordance with 1 VAC 30-45, Certification for Noncommercial Environmental Laboratories, or 1 VAC 30-46, Accreditation for Commercial Environmental Laboratories. Field sample testing and measurements performed at the site where the sample is taken, are not subject to the requirements of 1VAC30-45 or 1VAC30-46.

#### B. Records

- 1. Records of monitoring information shall include:
  - a. The date, exact place, and time of sampling or measurements;
  - b. The individual(s) who performed the sampling or measurements;
  - c. The date(s) and time(s) analyses were performed;
  - d. The individual(s) who performed the analyses;
  - e. The analytical techniques or methods used; and
  - f. The results of such analyses.
- 2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Board.

# C. Reporting Monitoring Results

1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to:

# C. Reporting Monitoring Results (Continued)

Virginia Department of Environmental Quality Blue Ridge Regional Office 3019 Peters Creek Road Roanoke VA 24019-2738

- 2. Monitoring results shall be reported on forms provided, approved or specified by the Department.
- 3. If the permittee monitors the pollutant management activity at a sample location specified in this permit for any pollutant specifically addressed by this permit more frequently than required by this permit using methods specified in Part II.A of the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the monitoring report.
- 4. If the permittee monitors the pollutant management activity at a sample location specified in this permit for any pollutant that is not required to be monitored by the permit using methods specified in Part II.A of the permit, the results of the this monitoring shall be submitted with the monitoring report form specified by the Department.
- 5. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

## D. <u>Duty to Provide Information</u>

The permittee shall furnish to the Department, within a reasonable time, any information which the Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit. Plans, specifications, maps, conceptual reports and other relevant information shall be submitted as requested by the Board prior to commencing construction.

# E. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

# F. <u>Unauthorized Discharges</u>

Except in compliance with this permit, or another permit issued by the Board, it shall be unlawful for any person to:

- 1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or
- 2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses.

## G. Reports of Unauthorized Discharges

Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part II F; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part II F, shall notify the Department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the Department, within five days of discovery of the discharge. The written report shall contain:

- 1. A description of the nature and location of the discharge;
- 2. The cause of the discharge;
- 3. The date on which the discharge occurred;
- 4. The length of time that the discharge continued;
- 5. The volume of the discharge;
- 6. If the discharge is continuing, how long it is expected to continue;
- 7. If the discharge is continuing, what the expected total volume of the discharge will be; and
- 8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the Department under the immediate reporting requirements of other regulations are exempted from this requirement.

# H. Reports of Unusual or Extraordinary Discharges

If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify, in no case later than 24 hours, the Department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse affects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the Department within five days of discovery of the discharge in accordance with Part II I 2. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:

- 1. Unusual spillage of materials resulting directly or indirectly from processing operations;
- 2. Breakdown of processing or accessory equipment;
- 3. Failure or taking out of service some or all of the treatment works; and
- 4. Flooding or other acts of nature.

# I. Reports of Noncompliance

The permittee shall report any noncompliance which may adversely affect state waters or may endanger public health.

- 1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this paragraph:
  - a. Any unanticipated bypass; and
  - b. Any upset which causes a discharge to surface waters.

# I. Reports of Noncompliance (Continued)

- 2. A written report shall be submitted within 5 days and shall contain:
  - a. A description of the noncompliance and its cause;
  - b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
  - c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The Board may waive the written report on a case-by-case basis for reports of noncompliance under Part II I if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

3. The permittee shall report all instances of noncompliance not reported under Parts II I 1 or 2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II I 2.

NOTE: The immediate (within 24 hours) reports required in Parts II G, H and I may be made to the Department's Regional Office at (540) 562-6700 (voice) or (540) 562-6725 (fax). For reports outside normal working hours, leave a message and this shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of Emergency Services maintains a 24 hour telephone service at 1-800-468-8892.

# J. Notice of Planned Changes

- 1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility.
- 2. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

# K. Signatory Requirements

- 1. Applications. All permit applications shall be signed as follows:
  - a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

## K. Signatory Requirements (Continued)

- b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
- c. For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
- 2. Reports, etc. All reports required by permits, and other information requested by the Board shall be signed by a person described in Part II K 1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - a. The authorization is made in writing by a person described in Part II K 1;
  - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
  - c. The written authorization is submitted to the Department.
- 3. Changes to authorization. If an authorization under Part II K 2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II K 2 shall be submitted to the Department prior to or together with any reports, or information to be signed by an authorized representative.
- 4. Certification. Any person signing a document under Parts II K 1 or 2 shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

# L. <u>Duty to Comply</u>

The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Compliance with a permit during its term constitutes compliance, for purposes of enforcement, with the State Water Control Law.

## M. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. All permittees with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Board. The Board shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

#### N. Effect of a Permit

This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

#### O. State Law

Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by Section 510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part II U), and "upset" (Part II V) nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

## P. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Sections 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

# Q. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

# R. <u>Disposal of Solids or Sludges</u>

Solids, sludges, or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

# S. <u>Duty to Mitigate</u>

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

# T. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

#### U. Bypass

- 1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts II U 2 and U 3.
- 2. Notice
  - a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least ten days before the date of the bypass.
  - b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II I.
- 3. Prohibition of bypass.
  - a. Bypass is prohibited, and the Board may take enforcement action against a permittee for bypass, unless:
    - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
    - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
    - (3) The permittee submitted notices as required under Part II U 2.
  - b. The Board may approve an anticipated bypass, after considering its adverse effects, if the Board determines that it will meet the three conditions listed above in Part II U 3 a.

#### V. Upset

- 1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part II V 2 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.
- 2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
  - b. The permitted facility was at the time being properly operated;
  - c. The permittee submitted notice of the upset as required in Part II I; and
  - d. The permittee complied with any remedial measures required under Part II S.

## V. <u>Upset (Continued)</u>

3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

## W. <u>Inspection and Entry</u>

The permittee shall allow the Director, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

- 1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- 3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- 4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

## X. Permit Actions

Permits may be modified, revoked and reissued, or terminated for cause upon the request of the permittee or interested persons, or upon the Board's initiative. If the permittee files a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, the permit terms and conditions shall remain effective until the request is acted upon by the Board. This provision shall not be used to extend the expiration date of the effective VPA permit.

## Y. Transfer of Permits

- 1. Permits are not transferable to any person except after notice to the Department. Except as provided in Part II Y 2, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made, to identify the new permittee and incorporate such other requirements as may be necessary under the State Water Control Law and the Clean Water Act.
- 2. As an alternative to transfers under Part II Y 1, this permit may be automatically transferred to a new permittee if:
  - a. The current permittee notifies the Department at least 30 days in advance of the proposed transfer of the title to the facility or property;
  - b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and

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## Y. <u>Transfer of Permits (Continued)</u>

c. The Board does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part II Y 2 b.

## Z. Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

#### ATTACHMENT A

#### LISTING OF LAND APPLICATION SITES

- 1. Location: Giles County
- Facility/Operator/Contact Information: Mr. H.M. Scanland Jr., General Manager 115 Hotel Circle, Pembroke, VA 24136 (540) 626-7121
- Owner Name/Contact Information: Mary Moody Northen Endowment 2628 Broadway Street Galveston, TX 77550
- 4. Field Designations: 1-16
- 5. Net acres per site: 1
- 6. Other Information: The spray fields are located approximately 4,000 feet northwest of the hotel and approximately 1,000 feet west of the storage facility. See **Attachment A** of the Fact Sheet and the reissuance application for a location map.

#### ATTACHMENT B

#### **MONITORING REPORTS**

The following monitoring reports (MRs) are required at the frequencies noted below:

- Effluent Monitoring from Wastewater Treatment Plant (E-1) (due monthly)
- Storage Tank Monitoring (S-1) (due monthly, annually, 1/4 years)
   Monthly monitoring is required during months when effluent is land applied.
   Annual data due by July 10<sup>th</sup>
   1/4 years monitoring (Monitoring Periods July 2012 June 2016 due by July 10, 2016; July 2016 June 2020 due by July 10, 2020)
- Irrigation Sites (F-1...F-16) (due monthly; yearly)
   Note data from the previous months of irrigation in 2012 will be needed to complete the nitrogen applied year-to-date for the first monthly monitoring report due August 10, 2012.
   Annual data due January 10<sup>th</sup> for the previous calendar year. Provide notes with monthly submittals regarding inactive fields. When land application has not occurred, include a note with the monthly submittal indicating no land application.
- Soil Monitoring (D-1) (1/4 Years) (Monitoring Periods July 2012 June 2016 due by July 10, 2016;
   July 2016 June 2020 due by July 10, 2020)
- Land Application Report (Monthly) (provide comment (no application) on months when land application does not occur)
- Ground Water Monitoring (Quarterly) Monitoring Periods July September: due by October 10th,
  October December: due by January 10th, January March: due by April 10th, April June: due by
  July10th) Submit MRs for M-1 (upgradient well), M-2 (upgradient spring), M-3 (downgradient
  spring), M-4 (downgradient well).
- Annual Project Summary Report (due annually February 10th)